

531, 481

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 May 2004 (13.05.2004)

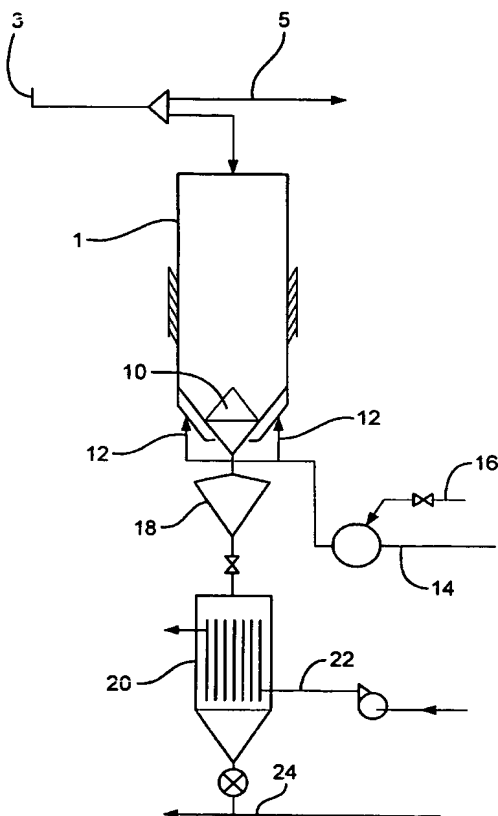
PCT

(10) International Publication Number
WO 2004/039848 A1

- (51) International Patent Classification⁷: **C08F 6/00**,
6/28, C08L 23/00
- (21) International Application Number:
PCT/EP2003/012041
- (22) International Filing Date: 27 October 2003 (27.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0225273.2 30 October 2002 (30.10.2002) GB
0315619.7 3 July 2003 (03.07.2003) GB
- (71) Applicant (for all designated States except US): **SOLVAY POLYOLEFINS EUROPE - BELGIUM (S.A.)**
[BE/BE]; Rue du Prince Albert 44, B-1050 Brussels (BE).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **COUSIN, Frederic**
[FR/FR]; Rue Hulin 2, F-57430 Sarralbe (FR). **WAL-
WORTH, Brent** [US/BE]; Nijverheidsstraat 50, B-9100
Sint-Niklaas (BE).
- (74) Agent: **SMITH, Julian, Philip, Howard**; BP Interna-
tional Limited, Patents & Agreements, Chertsey Road,
Sunbury-on Thames, Middlesex TW16 7LN (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: POLYMER TREATMENT



(57) Abstract: A process for the separation of volatile material from particulate polymer which has been substantially freed from unreacted monomer in an earlier separation step, comprising (a) feeding the particulate polymer to a purge vessel, optionally causing it to move through the vessel in substantially plug-flow mode, (b) heating the particulate polymer in the purge vessel to a temperature greater than 30°C but insufficiently high to cause the particles to become agglomerated, and/or maintaining the polymer at a temperature in this range in the purge vessel, (c) feeding gas to the purge vessel counter-current to the movement of the particulate polymer to remove volatile material therefrom, (d) removing the particulate polymer from the purge vessel, wherein substantially all of the heating of the particles which occurs in the purge vessel is accomplished by preheating the gas fed into the purge vessel.

WO 2004/039848 A1



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG,*

ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.